Impact Factor:					
	ISRA (India) = 6.317	SIS (USA) = 0.912	ICV (Poland) = 6.630
	ISI (Dubai, UAE) = 1.582	РИНЦ (Russia) = 3.939	PIF (India) = 1.940
	GIF (Australia) = 0.564	ESJI (KZ) = 9.035	IBI (India) = 4.260
	JIF = 1.500	SJIF (Morocco) = 7.184	OAJI (USA) = 0.350

SOI: 1.1/TAS DOI: 10.15863/TAS

International Scientific Journal

Theoretical & Applied Science

p-ISSN: 2308-4944 (print) **e-ISSN:** 2409-0085 (online)

Year: 2021 **Issue:** 10 **Volume:** 102

Published: 21.10.2021 **http://T-Science.org**

QR – Issue QR – Article

Nazar Nazarov
Tashkent State University of Economics
PhD candidate at the Department of World Economy,
+998 90 9452728
Nazar_3485@inbox.ru

ANALYSIS OF BUSINESS ENTITIES WITH THE DEVELOPMENT OF INNOVATIVE AND INVESTMENT ACTIVITIES OF ENTREPRENEURSHIP IN FREE ECONOMIC ZONES

Abstract: *In modern days Uzbekistan intending development free economic zones in all regions of the country. Small industrial zones, techno parks and service based zones are main targets of small and medium business. Current paper work dedicated for analyzing overall 441 companies out of 19 regions. Main purpose is analyzing innovative-investment relationship among 11 variables for rising economics efficiency of the business entities in the zones. Outcomes can be reported as Factor analyses modeling with Bartlett method with Kaiser Miter Olkin test. Conclusion has been drawn as influence of selected four indexes into one another.*

Key words: *Free economic zone, business entities, innovations, investment, factor analyses*

Language: *English*

Citation: Nazarov, N. (2021). Analysis of business entities with the development of innovative and investment activities of entrepreneurship in free economic zones. *ISJ Theoretical & Applied Science, 10 (102),* 719-727.

Soi: http://s-o-i.org/1.1/TAS-10-102-73 ***Doi***: https://dx.doi.org/10.15863/TAS.2021.10.102.73

Scopus ASCC: *2000.*

Introduction

Improving the economic efficiency of business entities operating in more than 20 free economic zones, ensuring sustainable economic growth, production of their production, remains reluct [1].

Intensive development of business entities will depend on the development of economic relations of enterprises within the network, the creation of new jobs, localization of imports and investment in imports, as well as attracting investment in imports. As a result, the possibility of producing high quality competitive products based on innovative and investment approaches. In our research, we will try to analyze these problems in the activities of a total of 441 companies operating in 19 regions during 2019 [2].

As an evident approach and object, the analysis of business entities in free economic zones for the development of innovative and investment activities of business and investment were used on the basis of the data of the State Statistics Committee. As the parameters of the model (hectare of production (square meters), production capacity (souds), production (dollar), exports), investment (interest), investment Attract (dollars from its own legislative), the investment (bank is issued mln. dollars), created), created for the distribution and specialization of areas of business.

Table 1. Our country is general statistics of entrepreneurship in free economic zones

Variable	Obs	Mean	Std. Dev.	Min	Max
молиялашти~л	391	1.224517	1.863459	.011	16.1
инв~б_млндол	171	.6853667	1.55278	0	12.7
инв~т_млндол	93	10.19324	40.10709	0	300
яратилган_~р	413	71.10896	119.9433	8	1800
non_numeric	461	.0065076	.1397239	0	3
экспорт_млнд	436	101.6674	74.07916	1	250
маҳаллийла~з	461	208.0174	97.95738	1	344
ишлабчиқар~а	424	445.5943	128.7819	105	635
ишлабчиқар~м	424	445.5943	128.7819	105	635
ер_майдони~а	420	308.6024	225.7331	35	702
тадбиркорл~б	441	901.1769	154.71	78	1124
ҳудудлар	457	1134.635	28.47691	722	1167

Information on the location of the total recorded business entities by regions and their specialization in the free economic zones of our country are represented in Table 1. According to him, information is different from the factors provided for in some of the variables for repeating the production sector and directions of free economic territories. According to the schedule, the average values of the selected parameters, the lower and maximum recorded values recorded, recorded in devices, factors. For example, jobs created in 413 projects, its average worth 71 people, and 1,800, at the same time, were 1,800 worth of the lowest value. The remaining variables can be explained on the basis of this approach [3].

During the analysis, it was used as a fictive analysis (Factor Analysis) method, and modeled on the basis of actions and commands in six stages. This method is also called indexing methods in some publications. According to the model terms, similar parameters are combined under the new index that is not observed during the study, analyzed according to the values of the relationships between them.

Results

We concentrated all the parameters in the four main indexes and identified them in the following stages.

Table 2. Image statistics of the investment index

Variable	**Factor1**	**Eigenvalue**	**Uniqueness**	**Proportion**	**Cumulative**
Инвт_бамлнд	0,718	1.031	0.484	0.515	0.515
Инвт_ўзмлнд	0.489	0.968	0.485	0.485	1.000
Method		Principal component analyses			
Number of observations		81			
Chi2(1)=0.08		Prob>chi2=0.0781			
factor инвестиция_банккредит_млндол инвестиция_Ўзмаб_млндол,pcf					
Utility index		**Инвестиция**			

The investment index contains variams of funds attracted on the basis of investments and personal funds allocated by the bank. This index covers a total of 81 business entities [4].

The N0 hypothesis was inscribed between invoice index, involved in invoice, invasion of invozmils. With the Investment Index, the invoice Yuki (Factor Loading) and invoice Loading 0.489. This value can be accepted as a correction facts. According to the results of the analysis, Chi2 (1) = 0.08 and its value were recorded. We can only reject our hypothesis only P <0.10% level.

The unavailable test of the index with another variable (UNIQUENES) has made 0.484 and 0.485 respectively. This means that the investment index can include 50 percent of probably other factors. The ratio of the recorded values is making the bank's funds over 0.30 units.

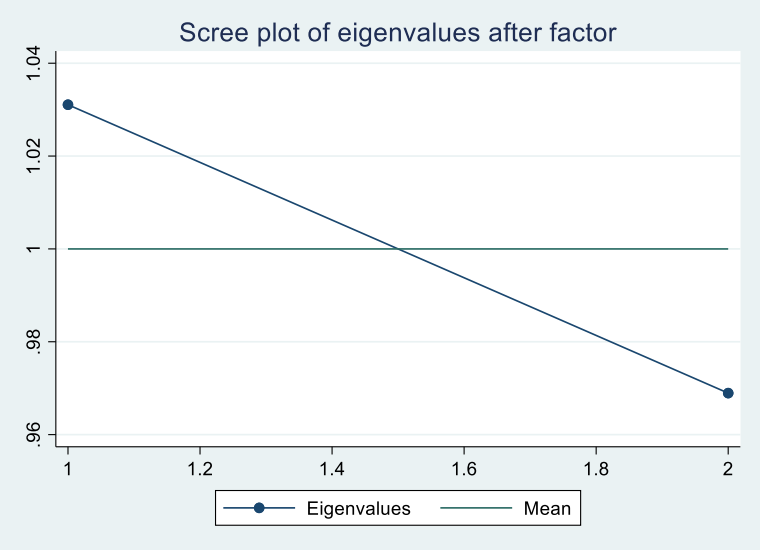


Figure 1. The Eigenvalue of the investment index

AGENGENT VALUE is determined as a result of the stability of these index structures and analysis of vibrations.

The cost value of invm_bamlden factor was 1.031 and a different value of invm_hummil's factor 0.968.

Formation of the next "terreatal" index is also carried out on the basis of the above sequence. At the same time, the number of observations includes 413 projects. This index includes two variables. In particular, the "Potential to Malunder" and "Er_mayo_hexars" The factor burden is 0.795 and 0.712, respectively. However, the lack of the ability to replace with another variable is very close to 1 and recorded 0.993 and 0.893.

Table 3. Image statistics of the land area index

Variable	**Factor1**	**Eigenvalue**	**Uniqueness**	**Proportion**	**Cumulative**
Ишлабчиқариш	0,795	0.0126	0.993	40.587	40.587
Ер_майдони_га	0.712	-0.012	0.893	-39.587	1.000
Method		Principal component analyses			
Number of observations		413			
Chi2(1)=0.06		Prob>chi2=0.080			
Factor ишлабчиқариш ер_майдони_га, pcf					
Utility index		**Ер майдони**			

According to the results of the analysis, Chi2 (1) = 0.06 and its value were recorded in probation. We can only reject the hypothesis only P <0.10% level.

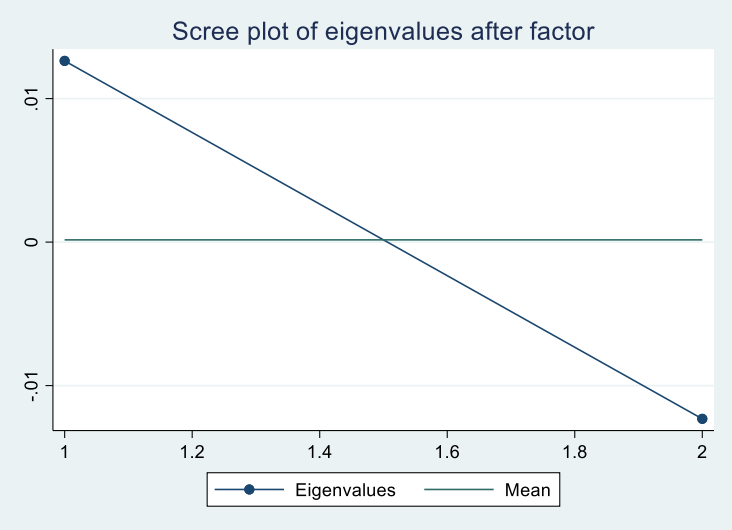
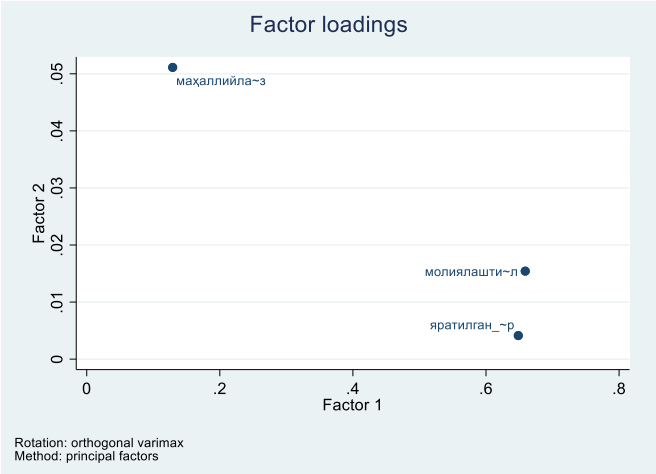


Figure 2. The Eigenvalue of the Ер майдони index

The next innovation index includes variables such as localization, financing and created jobs, covering a total of 388 businesses. According to the results of the analysis, Chi2 (1) = 143.89 and its probs were worth valueing. This proves statistical levels at his P <0.05% (Fig. 3).



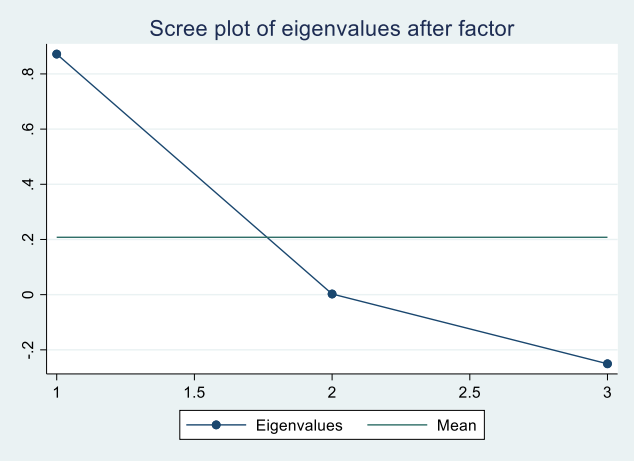
Picture 3. Factorloading of Инновациялар index

This index notes 0.130, 0.659 and 0.648 factor Yuki (Factor Loading), respectively, with "Local", "financing", "financing" and "created_ishor".

Table 4. Image statistics of the Innovation Index

Variable	**Factor1**	**Eigenvalue**	**Uniqueness**	**Proportion**	**Cumulative**
Маҳаллийлаштр	0,130	0.871	0.980	1.397	1.397
Молиялаштир	0.659	0.002	0.565	0.003	1.401
Яратилган_ишўр	0.648	-0.250	0.579	-0.401	1.00
Method		Principal component analyses			
Number of observations		388			
Chi2(1)=143.89		Prob>chi2=0.000			
Factor маҳаллийлаштириш_фоиз молиялаштириш_ўзмаблағлиримлндоллор яратилган_ишўринлари, pcf					
Utility index		**Инновациялар**			

In the Innovation Index, the aygen value of the localization variable was 0.871, the funding value was 0.002, and the inverse value of the created_place variable was -0.250 (Figure 4).



Picture 4. Eigenvalue of "инновациялар" index

The latest Productivity Index also includes factors such as export_mlndol, producer_billion, entrepreneur_subject and region_specialization. This index represents the economic efficiency of 406 projects of business entities operating in the free economic zones of the country [5].

Table 5. Descriptive statistics of "Самарадорлик" indexстатистикаси

Variable	**Factor1**	**Eigenvalue**	**Uniqueness**	**Proportion**	**Cumulative**
Экспорт_млндол	-0,219	0.311	0.892	2,056	2,056
Ишлабчиқар_млрд	0.177	0.139	0.902	0.925	2,981
Тадбиркор_субъек	0.359	-0.125	0.869	-0.830	2,150
Худуд_ихтисослаш	0,324	-0,174	0,885	-1,150	1,000
Method		Principal component analyses			
Number of observations		406			
Chi2(1)=31,49		Prob>chi2=0.000			
Factor экспорт_млндол ишлабчиқар_млрдсўм тадбиркор_субъектлари худуд_ихтисослаш,pcf					
Utility index		**Самарадорлик**			

The table shows an inverse relationship (-0.219) with the export results of entrepreneurs. The product production index was 0.177 units. A closer look at the factor load of the index reveals that the variability of specialization of business entities in the production of goods and services constitutes the highest correlation (Figure 5).

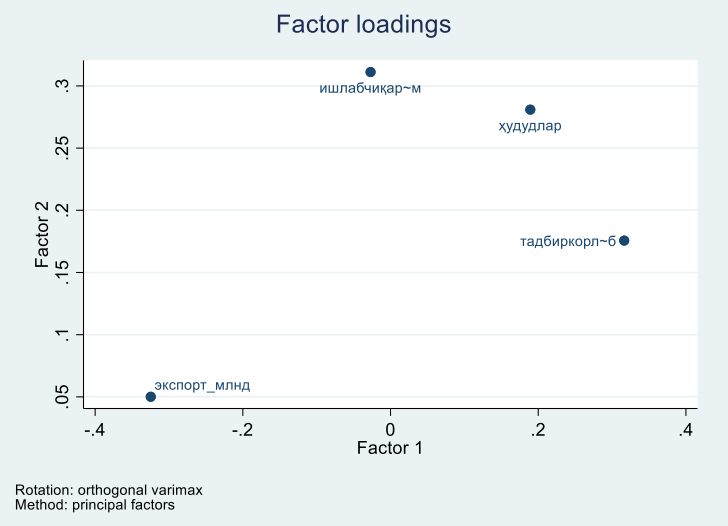


Figure5. Factorloading of “Самарадорлик” index

Corresponding to the variables of this index, the value of aygen is 0.311 for "export_mlndol", 0.139 for "producer_mlndol", -0.125 for "entrepreneur_sub'ek" and -0.174 for "region_specialization" (Figure 6).

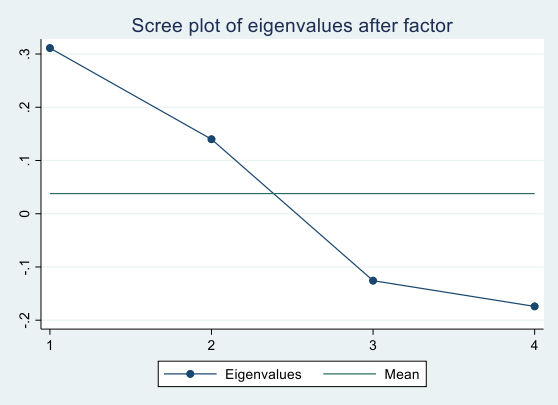


Figure 6. Eigenvalue of “Инновациялар” index

Discussion

We will now perform the modeling process using a series of tests to determine the correlation of the four indexes (Latent) formed. In this analysis, the maximum likelihood method was used. According to him, due to the fact that the 11 independent variables involved in the study were in different units and quantities, it is possible to draw a general conclusion by converting them into 4 indices in the method of rounding and systematization [6]. To ensure the accuracy of the model (maximum likelihood), the STATA 16.0 program selected 469 projects from 467 business entities.

Table 6. Regression analyses of selected indexes

Estimation method = ml
Log likelihood = -83.881708

	OIM Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Structural						
Инновациялар						
Инвестиция	.4306432	.0727324	5.92	0.000	.2880904	.573196
Ер_майдони	.0024974	.0009397	2.66	0.008	.0006556	.0043391
_cons	.0966334	.0101341	9.54	0.000	.0767709	.1164959
Инвестиция						
Ер_майдони	.0021336	.0015122	1.41	0.158	-.0008303	.0050975
_cons	.0608672	.0148747	4.09	0.000	.0317134	.0900211
Самарадорлик						
Инновациялар	-.6329833	.1829097	-3.46	0.001	-.9914798	-.2744868
Инвестиция	.4070874	.1370045	2.97	0.003	.1385634	.6756114
Ер_майдони	-.0067952	.0015186	-4.47	0.000	-.0097716	-.0038188
_cons	.7365872	.0235874	31.23	0.000	.6903568	.7828176
var(e.Инновациялар)	.00589	.0009886			.0042389	.0081843
var(e.Инвестиция)	.0156821	.002632			.011286	.0217905
var(e.Самарадорлик)	.013991	.0023482			.010069	.0194407

As the N0 hypothesis is put in such a way that there is no correlation between the four indices, almost all parameters are statistically significant. As a result, we can reject the N0 hypothesis and evaluate their interactions based on the condition that the value of r is at the level of r <0.05% (Table 6). The first column of the table shows the correlation coefficients, and the correlation of the selected parameter is clearly expressed. Based on these data, a latent model for the development of innovation and investment activities of business entities was formed (Figure 6).

According to him, the factors located inside the rectangle are the main parameters in the research process, as well as the factors that are not encountered in the research process (formed Latent) within the oval shape [9]. Random errors are expressed in small circles. The dashed lines represent the direct effects and relationships of the indices. The recorded values were determined on the basis of the level of the test coefficient and its r values (r <0.05%, R <0.01%).

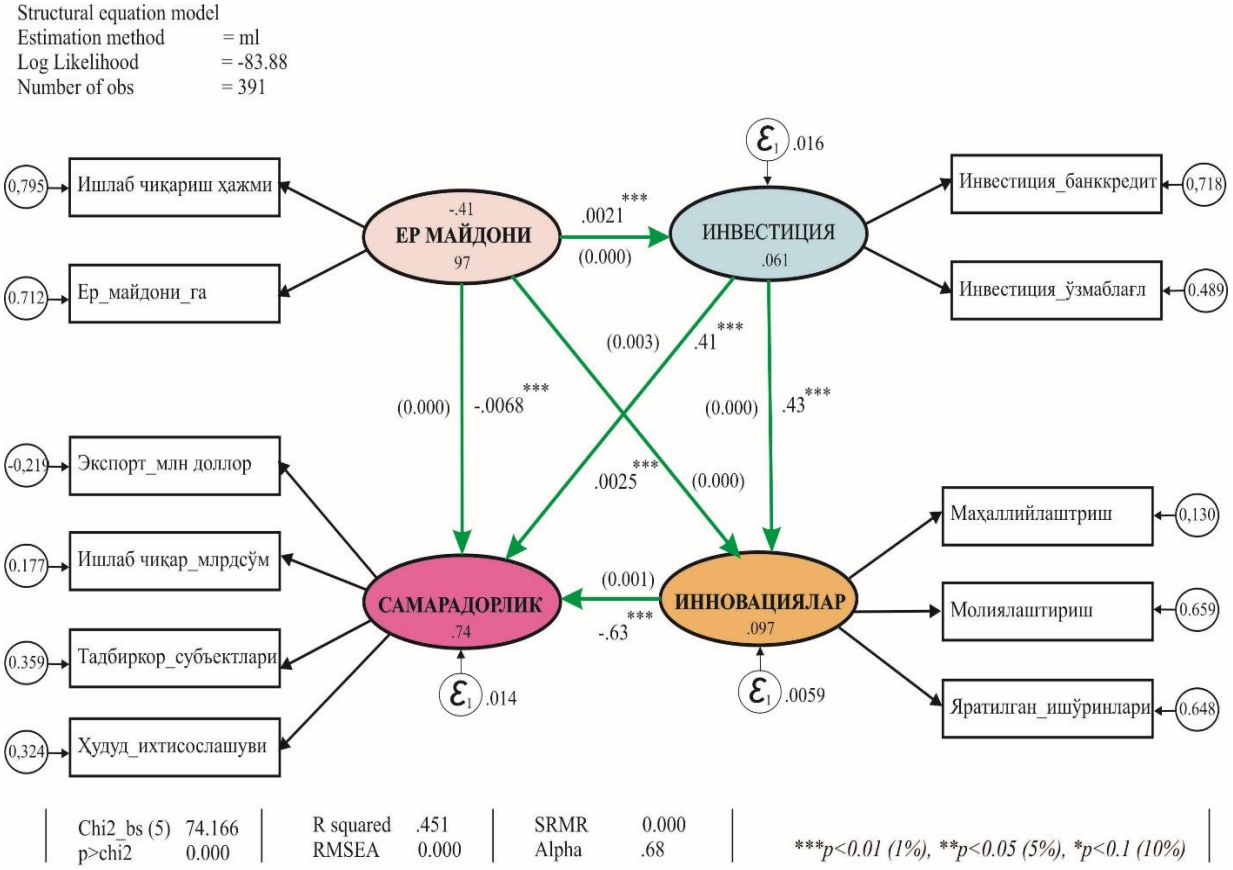


Figure 6. Latent model of development of innovation and investment activities of business entities in free economic zones

We used the chi2 test to prove that the process was not random. As a result, chi2 has a coefficient of 74,166 and its r value is 0.000. This proved the statistical significance of the model by rejecting the hypothesis put within the error range of r <0.05%.

If we analyze the results of the analysis inductively, we can conclude that:

1. Increasing the area of land allocated per hectare in EIHs will increase the volume of investment by 0.0021%.

2. Increasing the area of land allocated per hectare in EIHs will increase the amount of investment by 0.0025%.

3. Increasing the amount of investment by one million dollars will increase innovation by an additional 43%.

4. Increasing the amount of investment by one million dollars will increase the economic efficiency of business entities by an additional 41%.

According to the Cronbach alpha test, businesses have a latent adverse effect on cost-effectiveness. In this regard, the relationship is explained as follows:

5. In order to increase the economic efficiency of business entities by one billion soums, it is necessary to allocate an additional 0.0068% of land.

6. In order to increase the economic efficiency of business entities by one billion soums, an additional 63% of innovations are needed.

According to the model parameters (R squared), the determination coefficient is 45 percent. Root Mean. Square Error of. Approximation (RMSEA 0.000) found that the mean distribution of the square root of the errors was statistically significant. According to the Cronbach Alpha test, the reliability of the model was 68% [7].

Conclusion

In order to encourage the effective use of the economic potential of the regions and increase their involvement, the powers of local government bodies aimed at strengthening the revenue base of local budgets are being expanded [8],[10]. Achieving additional tax revenues through the development of production and services, the removal of subsidies from the regions and the retention of national taxes in local budgets, etc., directly increase local budget revenues, which in turn contributes to the welfare of the regions. As a result, by 2018, all local budgets were completely excluded from subsidies, and today regulatory inter-budgetary transfers are used.

References:

1. Torazoda, B. (n.d.). *Free economic zones are the backbone of development*. Retrieved April 28, 2021 from https://parliament.gov.uz/uz/events/opinion/34365/
2. (n.d.). Retrieved from https://cyberleninka.ru/article/n/erkin-iqtisodiy-zona-maxsus-iqtisodiy-zonaning-bir-ko-rinishi-sifatida
3. (2021). *Prepared on the basis of the Resolution of the President of the Republic of Uzbekistan dated April 2, PQ-5048.*
4. (n.d.). *Created by the author based on the official website of the Public-Private Partnership Development Agency under the Ministry of Finance of the Republic of Uzbekistan*. Retrieved from https://pppd.uz/projects-custom
5. (n.d.). Retrieved from stat.uz.
6. (n.d.). Retrieved from https://xs.uz/uz/post/erkin-iqtisodij-zonalar-taraqqiyot-tayanchi
7. (n.d.) Retrieved from https://www.uzavtoyul.uz/uz/post/erkin-iqtisodiy-zonalar-va-kichik-sanoati-zonalarini-rivojlantirish-masalalari-muhokama-qilindi.html
8. (n.d.). Retrieved from https://adti.uz/wp-content/uploads/2018/12/Farmatsevtika-tarmoq
9. (n.d.). Retrieved from https://www.coursehero.com/file/61903477/Erkin-iqtisodiy-zonalardocx/
10. (n.d.). Retrieved from https://cityeconomy.uz/uz/news/uzb-yangiliklari/ozbekiston-iqtisodiy-erkinlik-indeksi-2021-hisobotida-108-oringa-kotarildi